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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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02/27/2004

Junya Shirahata

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ALEXANDRIA, VA 22320-4850

EXAMINER

NGUYEN, CAM N

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

03/31/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/787,194	SHIRAHATA, JUNYA	
	Examiner	Art Unit	
	Cam N. Nguyen	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/29/08 (an amendment/response).
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on originally filed is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on 12/29/08 has been made of record and entered. Claims 1 & 3 have been amended.

Claims 1-4 are currently pending in this application.

Claim Rejections - 35 USC § 102(e)

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Reisinger et al., “hereinafter **Reisinger ‘589**”, (PG Pub. No. US 2004/0028589).

Reisinger ‘589 discloses a catalyst containing a layer on an inert carrier body comprising noble metals from the platinum group deposited on support materials, wherein the layer comprises platinum deposited on compounds selected from the group consisting of metal oxides including mixed oxide of zirconia/ceria (see page 5, claim 1). The support further comprises ceria/zirconia mixed oxide, which is stabilized with praseodymia, yttria, neodymia, lanthana or mixtures thereof (see page 5, claims 4 & 5). The zirconia/ceria (or zirconia-rich) contains at least more than 50% by weight of zirconia, and the balance is the stabilizer, such as lanthana,

yttria, etc. (see page 2, paragraph [0018]). The support also contains ceria/zirconia (or ceria-rich) with ceria being contained in the amount of from 60 to 90 wt.% relative to the weight of the mixed oxide, and the stabilizer can be contained in this mixed oxide in the amount of from 0.5 to 10 wt.% relative to the total weight of the stabilized material (see page 2, paragraph [0019]).

The limitation on “a loading layer formed on the catalyst support substrate, and comprising cerium oxide and zirconium oxide in a summed amount of 80% by weight or more with respect to the entire loading layer taken as 100% by weight” is noted.

It would appear that ***Reisinger '589*** reference discloses the same catalyst, and the catalyst contains a catalyst layer, which contains the same metal oxide (cerium oxide and zirconium oxide) and at least one additive member (or stabilizer) with additive being contained in the disclosed mixed oxide of cerium and zirconium oxide in the amount of from 0.5 to 10 wt.%, which provides for the mixed metal oxide of cerium and zirconium oxide contained in the catalyst layer being in the amount of 90 to 95 wt.% , which meets the claimed limitation.

The claimed catalyst does not appear to distinguish from the disclosed catalyst. Thus, the claims are anticipated by the teaching of the reference.

Response to Applicants' Arguments

4. The remarks filed on 12/29/08 have been fully reconsidered, but not deemed persuasive for the following reasons.

Applicants argue that “the ***Reisinger '589*** teaches a ceria/zirconia mixed oxide and not a mixture of cerium oxide and zirconium oxide” is noted. It would appear from the ***Reisinger '589*** reference at table 1, paragraph [0057] that the ceria/zirconia (or CeO_2 and ZrO_2) are disclosed,

which is the same as a mixture of the oxides. Thus, there is no difference between the claimed mixture of oxides and mixed oxides disclosed.

Applicants further argue that "the positive disclosure of *Reisinger* '589 describes a catalyst having a loading layer whose main component is substantially aluminum" is also noted. Examiner disagree with applicants' argument and request that applicants point out column and lines in the reference, where it discloses the teaching mentioned above.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

6. Claims 1-4 are pending. Claims 1-4 are rejected. No claims are allowed.

Contacts

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner CAM N. NGUYEN, whose telephone number is 571-272-1357. The examiner can normally be reached on M-F, 9:00 AM - 6:30 PM, at alternative work site.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Cam N. Nguyen/

Primary Examiner

Art Unit: 1793

/C. N. N./

March 25, 2009